

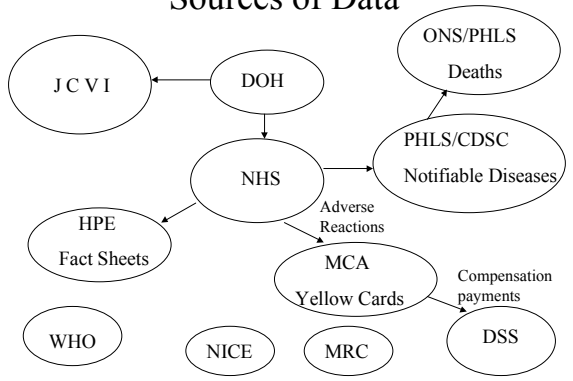
UK Vaccination Programme - Risk and Reward

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Terms of Reference

“Our aim is to investigate, and hence stimulate informed debate and possible further studies, on the balance between risk and reward inherent in the current UK vaccination program from an independent statistically informed viewpoint. We do not aim to carry out any new investigations or studies but to interpret and assimilate existing data and studies. As part of our fact-finding we will try to discover whether any organisation currently monitors the trade-off between risk and reward, and what mathematical or statistical models are used.”

Sources of Data



Risk/ Reward Dilemmas

- Herd Immunity (Individual vs Private Interest)
- Success Breeds Dilemmas
- Transfer of Risk
 - Between age groups
 - Social groupings
- Causality and Difficulty of Proof of Adverse Reactions

Case Study 1: Polio

- History
- An Epidemiological model
- Current Risks vs Rewards

Case Study 2: MMR

- History
- An Epidemiological Model
- Current Risk vs Rewards
- Causality

Discussion

- What can actuaries add?
- What can actuaries learn?
- Is there scope for further work?
- Why is the trail so difficult to follow?
- Is there a need for further independent informed scrutiny?

Where do we go from here?

- Other Vaccines?
- Models?
- Other Experts – medical, epidemiologists?
